



**Australian Army
Research Centre**



Every Possible Capability: Some Implications of the Army Reserve Call Out for Operation Bushfire Assist 2019-2020

Mark Armstrong



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Foreword

The 2019–20 Australian bushfire season, colloquially known as the Black Summer, will be remembered as an unprecedented national emergency. Initially a scattering of disconnected fires across southern and eastern Australia, by late December 2019 their scale and intensity had transformed these isolated events into a national crisis. So many destructive fires, across so large an area, affecting so many communities triggered a looming human and environmental disaster. It quickly became clear we faced a national emergency—one that required a national response.

At this juncture, Prime Minister Morrison made the decision to surge the ADF to support emergency management services, seeking an unprecedented call out of the Reserve. On 4 January 2020, the Governor-General ordered the call out of over 2,500 reservists for the first time in Australian history. Operation Bushfire Assist would become the largest peacetime disaster response operation to date, with thousands of soldiers, sailors, airmen and defence civilians working closely in support of state and local governments, emergency services and fire-affected communities in a true whole-of-government response.

In this compelling occasional paper, Mark Armstrong charts the history of our reservists during domestic natural disasters to contextualise their call out and subsequent employment on Operation Bushfire Assist. Our reservists responded quickly despite the traditional holiday period, providing a range of support to state fire and emergency services to protect life, livestock and property. Their professionalism, enthusiasm and commitment was to have a profound and lasting effect on the communities they supported.

Through this important story, Mark provides some thought-provoking suggestions for how we prepare the joint force for the future; how we raise, train and prepare our Reserves for domestic disaster response; how to refine our networks of command and control; how to develop the force preparation, logistics and personnel policies that support such a force; and how best to build enduring close relationships with state and local governments and their emergency services—all in the hope of a more flexible, responsive and agile response in the future.

I commend this paper to you to generate important discussion and debate.

MAJGEN Jake Ellwood, DSC, AM

Commander

Operation Bushfire Assist

April 2020

We must move our posture as a commonwealth ... from a posture of respond and request, to move forward and integrate with the local response ... Half an hour ago the Governor-General signed off on the call out of the Australian Defence Force Reserves ... to surge and bring every possible capability to bear ...

Prime Minister Scott Morrison, 4 January 2020.¹

Introduction

During the latter months of 2019 and the new year of 2020, Australia experienced catastrophic and widespread bushfires. State premiers declared states of emergency and the federal government unexpectedly called out the Australian Defence Force (ADF) Reserves to bolster an already significant deployment of ADF regular forces to contribute to a massive interagency and volunteer community response. This deployment was the largest ever peacetime domestic ADF operation in response to a natural disaster.

The Prime Minister, Scott Morrison, announced the appointment of Major General (MAJGEN) Justin ‘Jake’ Ellwood, Commander 1st Division, to head the ADF’s emergency response. In his first message to ADF commanders in the field, MAJGEN Ellwood echoed the new federal government change of posture with a concept of operations that was to ‘move forward and integrate’.² Under his command, ADF numbers involved in the bushfire support efforts surged from under 900 to over 6,500 personnel over several weeks in January and early February 2020.³

Significantly, the ADF response featured thousands of members of the Army Reserve called out for mandatory service on 4 January 2020.⁴ Prime Minister Morrison and his Defence Minister, Senator Linda Reynolds, heralded the call out of the Reserves as ‘unprecedented’. Rather than calling for volunteers, the government was enacting provisions of the Defence Act 1903 to order reservists to report for duty in a national emergency. Reserve units and formations activated, quickly transferred to continuous full-time service (CFTS) and deployed into the field as formed bodies. The Governor-General revoked the call out on 7 February 2020 when the emergency phase to save life and property transitioned to relief and recovery operations.⁵



The 1976 Defence White Paper contained strategic guidance for the use of Reserves, on call out, as a national response to a natural disaster, possibly with the recent memory of Cyclone Tracy and the Brisbane floods of 1974 in mind. During the period 2000 to 2017 the ADF Reserves transitioned from being on stand-by as a strategic reserve for employment in an international or national defence emergency to an operational reserve to supplement and complement ADF regional and international operations. In this role, the Reserves reached a culminating contribution in the mid-2000s of approximately 18 per cent of ADF personnel on operations, mainly in small groups and individuals but also up to sub-unit level.⁶

In recent years, the Australian Government has been reviewing ways it can increase the resilience of communities in anticipation of natural disasters becoming more frequent and severe.⁷ Tellingly, the Prime Minister foreshadowed a more significant and proactive role for the ADF in domestic disaster relief.⁸ This intent, as well as the lessons from Operation Bushfire Assist (OP BA) in 2019–2020, is likely to have significant organisational implications for the Army in general and the Army Reserve in particular.

This paper will discuss the historical tasking and employment of the Army Reserve in domestic disaster relief operations, before describing the lead-up to and the call out and employment of reservists for OP BA. It will do so using a force projection framework.⁹ The paper will conclude with implications for Army of this unprecedented response to a natural disaster.

Use of Reserves in Domestic Disaster Relief Operations

Military forces around the world generally have a response role in major natural disasters. In situations where civilian capabilities are overwhelmed, the military can deploy assets and personnel at short notice and sustain them in austere operating environments, as well as supporting civilian relief agencies.¹⁰ In particular, the Army Reserve (part-time component) equivalents in countries such as Canada, the UK, Japan and the US have crucial roles in domestic disaster relief operations. There are a number of justifications for the use of Reserves in this role. Reserves reside in the regions and cities where disasters occur, rather than being concentrated in garrisons. Reserve units have local knowledge and develop relationships with civilian emergency services. Indeed, some reservists are also members of police forces and fire brigades and serve as emergency volunteers. The tasks required for military response in support of disaster relief operations are generally within the lower readiness and training levels of reservists.

The US National Guard has a homeland defence and response mission alongside its primary warfighting role. Disaster response is a crucial subordinate mission for which US National Guard formations have an annual certification and validation requirement. The US states can rapidly mobilise large numbers from the National Guard in response to a natural disaster. For example, within 10 days of Hurricane Katrina making landfall in August 2005, over 45,000 National Guard personnel had deployed to the affected areas.¹¹ Another example is the Japanese Self-Defense Forces (SDF). Japan experiences frequent natural disasters and the SDF regularly calls up reserves (mainly the highly trained ready reserve) for disaster relief operations. After the March 2011 earthquake and tsunami, a total of 1,600

SDF ready reserves and reserves participated in disaster relief. Reserves also mobilised after earthquakes in and around Kumamoto Prefecture in 2016, earthquakes in Hokkaido in September 2018, and Typhoon Hagibis in 2019.¹²

There are potential drawbacks to normalising the use of reserves in domestic disaster relief, including concerns over the dilution of warfighting skills, a marginal increased cost of employing reserves (relative to the fixed expenses of full-time forces) and the impact on employers and communities of mobilising reservists..

Historical Policy Context of the Use of the Australian Army Reserve in Disaster Relief

The 1976 Defence White Paper first raised domestic disaster response as a desirable capability for the ADF Reserve component. Still, it noted that the Defence Act did not allow for compulsory mobilisations other than in a declared domestic or international defence emergency.¹³

*... Parliament may well wish to consider whether the purpose of better training and better sense of participation would justify provisions authorising compulsory call-up of Citizen Reserves for limited periods ... not proclaimed as a state of war or time of defence emergency; or for short-term assistance to the civil authorities during a natural disaster. Such a change would require the amendment of the relevant law ...*¹⁴

The 1994 Defence White Paper discussed the potential of Reserves:

*The facilities, equipment and skills in Reserve units across Australia have the potential to provide valuable emergency relief assistance to the civil community ... which normally is provided only in response to specific requests from State and Territory authorities. Current arrangements for requesting Defence Force assistance allow Reserves to volunteer their services, but their immediate availability, and the diversion of resources away from military training activities, are currently seen as impediments to using them.*¹⁵

The 2000 Defence White Paper clearly articulated a role for the ADF Reserve component in disaster relief both domestically and internationally:

*ADF units, including Reserve units, make a major contribution to disaster relief in Australia and our immediate neighbourhood. The procedures to be followed in using the ADF to support domestic law enforcement and the rights and responsibilities of ADF members on such duties have recently been clarified and made more workable with the passage of new legislation.*¹⁶

An important milestone was when significant numbers of the Reserves participated in domestic security operations during the 2000 Sydney Olympics. Additional personnel were required because of a concurrent substantial commitment of ADF force elements to security operations in East Timor. In 2001, some 25 years after the 1976 Defence White Paper, amendments to the call out legislation finally allowed for the compulsory call out of Reserves in situations other than a defence emergency.¹⁷ There were also new processes to simplify administration of the transition from the status of part-time service to temporary full-time service.

In the early 2000s, each of the Reserve brigades raised company-sized groups (approximately 120 personnel) for the Reserve Response Force (RRF). The RRF focused on domestic security and disaster relief operations. Rewarded with a bonus payment for meeting readiness criteria, RRF personnel received specific training in domestic operations. The training regime included the five-day RRF course and a two-and-a-half-day RRF commanders' course. These courses included media awareness training, local disaster management frameworks, interagency coordination, domestic legal considerations, and tasks such as local liaison, cordon and search. Designed to run concurrently, the RRF operators and RRF commanders courses culminated in an exercise that met individual training and collective requirements.

Ultimately, call out of the RRF groups as formed bodies never occurred. Resources for the RRF dwindled by 2012, with the Army Reserve role shifting to one of an operational reserve focused more on warfighting.¹⁸ Still, many individuals with RRF training volunteered to participate as part of the significant Reserve contributions to the ADF's response to disasters, including the Victorian bushfires of 2007 and the Queensland floods and weather events of 2010–2011.¹⁹

Reserve brigades retained disaster response tasks after the demise of the RRF. Reserve units responded locally under Defence Assistance to the Civil Community (DACC) arrangements, and many had permanent missions to provide or support regional emergency response forces, alongside full-time Army units, during the high-risk weather season. However, their role remained a subordinate and largely reactive one.

Within the extant Defence emergency response framework, the joint operations support staff located around Australia are responsible for building and maintaining relationships with civil emergency management agencies and facilitating requests for assistance.²⁰ Defence support only occurs when local, state and other federal agencies assess that they are ‘overwhelmed’ and formally request assistance.²¹ Still, military aid has been frequent. In the seven years between July 2005 and June 2013, there were at least 275 instances of DACC support provided by the ADF.²²

In recent years, Defence has assigned the 2nd Division, a Reserve formation, an expanded role in the domestic incident security force. This tasking has prompted reinvigoration of individual and collective training regimes to support short-notice force projection of contingents into population centres.²³ A logical progression of this increased preparedness was a small trial call out of Reserves conducted in November 2019 before the worst of the bushfire crisis hit communities. This trial, of 23 personnel, tested the legal and bureaucratic processes for the call out process.²⁴ The trial, itself a significant milestone for Defence capability, was dwarfed by the announcement 37 days later of the mobilisation of up to 3,000 members of the Army Reserve.

Thus, the 2020 call-out was the culmination of decades of unrealised potential for the Reserve. Brought about by a combination of a large-scale disaster, timing, political will, organisational confidence and proper preparation, it amounted to an unmitigable test for the ‘Total Force’ concept, the ‘Total Workforce Model’ and the ‘Army in Motion’. The Chief of Army, Lieutenant General Burr, acknowledged that OP BA had presented Army with new challenges.²⁵ New approaches were improvised and implemented. The timeline of events meant that solutions were needed quickly.

OP BA Timeline and Actions

The Australian ‘high-risk weather season’, as Defence calls it, generally runs from late spring until early autumn. This period includes the Christmas school holidays and the public holidays associated with Christmas Day, Boxing Day, New Year’s Day and Australia Day. Most Army formations designate much of December and January as a ‘reduced tempo period’ with only skeleton staff on duty and small contingency forces (such as emergency support forces remaining on call). In this period full-time military personnel take leave and garrison support services are minimal. There is also a changeover of personnel in each military unit as they move between positions, often requiring a move to a new location (about one-third of the personnel from any one unit move annually).

For the 2019–2020 high-risk weather season, Defence support to the local community (DACC) started early. In September 2019, the ADF supported firefighting around Canungra in south-east Queensland. Bushfires began and spread in other states and territories, gradually exhausting the capacities of civil agencies. Declarations of ‘states of emergency’ requiring federal government support’ via the Commonwealth Disaster Plan (COMDISPLAN)²⁶ commenced, initially for New South Wales, on 31 October 2019. Within the next seven weeks, the COMDISPLAN activated for Queensland (11 November), Victoria (19 December), South Australia (4 January), Tasmania (4 January) and Western Australia (7 January). A further activation occurred on 6 February 2020 for flooding in New South Wales.²⁷

Before the February floods, ADF support escalated in the new year as bushfires worsened and spread. Army’s main effort focused on supplementing state and territory disaster relief efforts.²⁸ The initial trial call out of reservists, Operation Civil Assist 2019–2020, was modest involving less than two dozen reservists. The Governor-General’s call out of 3,000 reservists followed on 4 January 2020. This call out lasted 34 days, until 7 February 2020.

MAJGEN Ellwood took command as the Emergency ADF National Support Coordinator of Operation Bushfire Assist on 4 January 2020. On 7 January, he issued guidance to the ADF elements assigned to OP BA through the novel means of an open-source video distributed via social media. His orders included statements such as:

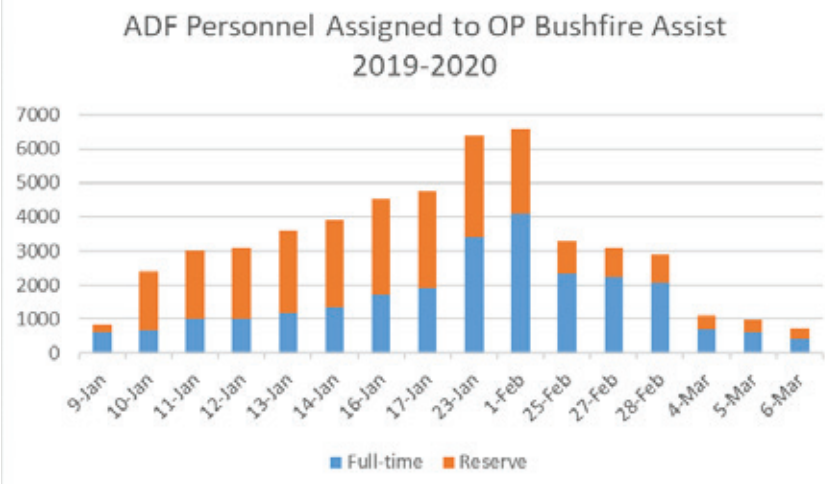


... lean forward ... find solutions ... if we can do it and it is ethical and responsible, we will ... do not have our people and assets dormant.²⁹

MAJGEN Ellwood departed from the traditional notions of support only when there is 'no suitable alternative source of assistance' and formal 'request for assistance' processes.³⁰ His was a proactive concept of operations stimulating initiative, improvisation and a sense of urgency to take action. Deployed commanders could not help but feel empowered by this very public declaration of trust and acceptance of risk by the MAJGEN. His guidance also delivered a clear message to emergency services that the ADF was there to help, not take over. The community was reassured that the ADF, with all of its resources, would be deployed for as long it was needed. In the context of a rapidly escalating crisis, this bold command stance and strategic communications method provided both freedom of action to deployed ADF elements and compelling, comforting messages to the public.

The total direct ADF participation in OP BA peaked at around 6,500 personnel, including approximately 3,000 reservists, on 23 January 2020.³¹ Of the reservists, 2,556 personnel served on CFTS because of the compulsory nature of the call out.³² Cumulatively, this represented the largest ever domestic ADF force projection in support of disaster relief in Australia’s history.³³

Figure 1: ADF personnel assigned to OP Bushfire Assist³⁴



Force Projection

Force projection underpins the capacity and capability of Australia to protect its strategic defence interests. The 2016 Defence White Paper defines these interests as 'a secure and resilient Australia ... a secure nearer region ... a stable region and international rules based global order'.³⁵ For Australia, a country with a huge land mass and sparse population, quickly deploying military forces within borders or to offshore territories can offer similar challenges to international projection.³⁶ For most of the time, the ADF is engaged in generic force preparation for a range of contingencies, including deploying in response to natural and human-made disasters. There are 10 enabling functions for force projection: generic preparation, command, specific preparation, deployment, protection, employment, sustainment, rotation, redeployment and reconstitution.³⁷ These functions offer a useful analytic framework for assessing a military operation.

Figure 2: Force projection functions

| No. | Function | Elements |
|-----|----------------------|---|
| 1. | Generic preparation | Military capability comprising force structure, readiness, mobilisation and sustainability |
| 2. | Command | Command, control, communications and computer systems |
| 3. | Specific preparation | Concentration of force elements in mounting or home bases, reconnaissance, reinforcement, training, administration, and issue of equipment and stocks |
| 4. | Deployment | Concentration of personnel and matériel, loading, movement of force elements to the area of operations, and best-effect arrival and pre-positioning |
| 5. | Protection | Intelligence, surveillance, contingency rehearsal and rapid response |
| 6. | Employment | Conduct of operations, which may include maintaining a deterrent presence, manoeuvre, and application of firepower |
| 7. | Sustainment | Planning and carrying out the movement of supplies and maintenance of forces through a supply chain |
| 8. | Rotation | Reinforcement, relief, resting, retraining, re-equipping and redeployment of force elements |
| 9. | Redeployment | Protected movement to specified locations, usually home bases |
| 10. | Reconstitution | Return to the required level of military capability |

Ideally, the ADF should be able to execute each of these functions effectively. Rehearsal is crucial to this effectiveness. While they are all essential functions, there is a tendency to only exercise or rehearse the employment function. Reasons for this include resource constraints, peacetime attitudes, limited time for exercises, organisational blind spots, organisational convenience, ambiguous strategic guidance, and conflicting priorities. Failure to exercise all of the functions, particularly sustainment, can give a false impression of capability. Bob Breen highlighted these factors in the late 1990s in relation to regional ADF operations, observing that the ADF was 'neither as proficient as it believed it was nor as competent as it should have been' in terms of force projection.³⁸ It follows that maintaining effectiveness across the enablers will be an even greater challenge for the Reserves, who generally train, exercise and deploy less often, in smaller numbers, than full-time elements.

This paper will now examine Operation Bushfire Assist using the 10 enabling functions of force projection. This examination of each function should identify any performance gaps in the call out and employment of Reserves in January and February 2020. The purpose is to identify lessons for future remediation of the Reserve component's responsiveness to natural and human-made disasters.

Generic Force Preparation

Military forces should be prepared for foreseeable missions. They should be organised and rehearsed appropriately for these missions and maintained at levels of readiness, including training and stocking levels for proficient human and asset performance, as well as reliable logistic support. This seems self-evident but in practice, in the same way as militaries focus on employment functions, their preparation may be focused on priority missions. Generic capability and generic force preparation describe the generalised preparation that occurs before warning for a particular task, comprising building and sustaining force structure, ensuring readiness, enabling mobilisation and delivering sustainability.

The deployment of the Army's higher readiness units in accordance with strategic guidance dictates that the ADF's generic preparedness for bushfires in the south and south-east of Australia in 2019–2020 would be suboptimal because Australia's regular land forces and bases are in

the north and north-west of Australia. The bulk of the regular Army is in Brisbane, Townsville and Darwin. In contrast, the Army's Reserve brigades were closer to the areas of bushfire activity in New South Wales, Victoria, South Australia and Tasmania. Reserve units and depots were better located to provide both personnel and facilities in support of OP BA. Regionally based reservists had local knowledge, habitual relations with civil authorities and short deployment times, as well as permanent supporting infrastructure. Reserve depots became staging areas for transiting force elements, forward operating bases, civilian evacuation locations and life support locations for emergency services units. Importantly, the use of existing Defence facilities minimised the risk of incoming military forces overwhelming limited local infrastructure.³⁹

The 2012 ADF Force Posture Review did consider requirements for likely disaster relief operations 'in our neighbourhood' and in northern areas of the continent but was silent on disaster relief in the southern regions.⁴⁰ Retention of Reserve units in southern Australia implies that they are more deployable for domestic disaster relief in the south than their regular counterparts in the north, but that rationale was not stated explicitly.⁴¹ One lesson from the 2019–2020 bushfires is that the next Force Posture Review should consider in more detail how regional Defence facilities could support local disaster response and increase the resilience of communities.

The disaster management framework guides government efforts to increase the resilience of communities. Within the full framework, abbreviated as PPRR (prevention, preparedness, response and recovery), the preparedness phase is somewhat aligned to the generic preparation function of force projection. The preparedness phase emphasises the importance of relationship-building and developing knowledge of processes and frameworks.⁴² Regular Army staff are often at a disadvantage for long-term relationship-building with civil emergency personnel, compared to reservists, who can spend most of their working lives in the same community. Therefore, an implication of an increased role for the Army Reserve in domestic disaster relief is the opportunity to expand and formalise interactions and training exercises with local disaster management organisations and regional Reserve units. This generic preparation would take advantage of the Reserves' 'persistent presence' of both individuals and units in regional areas.⁴³ There is also an opportunity to participate in individual training conducted by local training organisations such as

the Queensland Combined Emergency Services Academy in order to build relationships and increase mutual understanding of capabilities and structures.

In terms of generic organisational structure, the ADF Reserve component is a warfighting organisation prepared and configured to augment, round out and supplement full-time expeditionary forces. While warfighting is the priority, Reserve warfighting capabilities can adapt to disaster relief operations in the same way that the government expects to use full-time forces. While there are no dedicated disaster relief structures or skills in the Reserve, Reserve engineers, medical personnel and civil–military cooperation personnel can potentially contribute to relief efforts immediately.

The 2017 Force Structure Review of the 2nd Division only briefly mentioned roles for reservists in disaster relief. It did state, significantly, that local disaster relief was not a ‘force determinate’ and it recommended no change to the standing emergency support force tasks.⁴⁴ The underlying assumption appears to be that force structure optimised for warfighting can be satisfactorily adapted for domestic missions. This explains why military units with great utility in disaster relief, such as engineers, are not fielded in greater numbers.

In respect of readiness for mobilisation as part of generic force preparation, MAJGEN Ellwood mobilised reservists against a minimum baseline training requirement. This decision maximised the number of soldiers potentially deployable, as it included those with a basic level of training and readiness requirements.⁴⁵ This baseline proved sufficient to get ‘boots on the ground’ and provide much-needed support, but specific training for disaster relief operations was limited. Within the 2nd Division, limited specific training focuses on preparing company-sized emergency support forces for the high-risk weather season. Over the previous two years there had been additional training focused on domestic security tasks. Some of this directly contributed to preparedness both for mobilisation and for the bushfire task. This highlights how additional training applied to a greater portion of the Reserves could enhance a response.

Additional training more relevant to disaster relief could be implemented using the RRF training framework mentioned earlier. This framework of individual and collective training was designed to complement, rather than replace, warfighting training obligations and outcomes. It ensured that

there was a regime for specifically qualifying individuals and certifying force elements for operations in the domestic environment, including disaster relief. Interestingly, over 1,200 members of the 2nd Division still hold the RRF proficiency despite the scheme having been defunct for more than seven years.⁴⁶

Force Command

The command function refers to the command, control, communication and computer systems employed to enable efficient and effective deployment, employment, force protection and sustainment. In early January 2020, at short notice, the Reserve headquarters of 4th, 5th and 9th Brigades each transitioned to become an ADF joint task force (JTF) headquarters. For many years, the Reserve brigade headquarters were stripped of an operational, or deployable, role. Rather they were static 'raise, train and sustain' headquarters. As such, they had no generic preparation or time for specific training for an operational JTF role. The transition was therefore a considerable stretch. Significant augmentation of personnel and equipment was required. While they reportedly performed well in difficult circumstances, they were not trained, staffed or equipped for commanding military support to a civilian disaster relief effort.⁴⁷

This urgent and improvised employment of brigade headquarters for command and control of disaster relief efforts contradicted many previous institutional reviews that questioned the role and relevance of Reserve formation headquarters. Reviews assessed that there were too many Reserve headquarters with no operational role and too many underemployed senior and middle-ranking officers.⁴⁸ The employment of Reserve headquarters during OP BA demonstrated the value of regionally based brigade headquarters as a means to coordinate ADF preparation for and response to disasters. The lesson is to review the staffing, equipment and training of these headquarters to better prepare them for a rapid transition to an operational JTF headquarters for disaster relief. One glaring training deficiency is the paucity of joint staff training for Reserve officers. Only a few middle-ranking officers attend the Joint Operational Planning Course and even fewer complete the Australian Command and Staff Course (Reserve).

Specific Force Preparation

The specific preparation function includes the concentration of force elements, reconnaissance, augmentation, training and administration, as well as the issue of equipment and stocks. The short-notice mobilisation of thousands of reservists from around the continent tested what had previously been theoretical. There were several crucial unanswered questions. How many reservists will request exemptions? How long will over 2,000 CFTS applications take to process? How long will it take for the call out messaging to be disseminated? How long will it take for force elements to be ready for deployment? As a result of the 2020 call out, there is now valuable performance data for future contingency planning.

The transition from part-time to full-time employment status is one of the challenges of a call out of Reserves. Reservists typically serve under the provisions of Service Category 5 (SERCAT 5). The transition to CFTS (now categorised as Service Option C, or SERVOP C, in Defence's Total Workforce Model) involves changing to the same leave, superannuation and medical support entitlements as full-time ADF members. It takes significant amounts of staff time to identify, record and implement superannuation preferences and personal tax arrangements, as well as to conduct medical/dental checks. For the 2020 call out, Army personnel administration centres recalled staff from leave to facilitate the processing of CFTS paperwork.⁴⁹ Commanders had to manage risk by granting waivers and implementing other workarounds to speed up processing. Medical and dental support services were also stretched to verify and upgrade medical classification transfer to CFTS. Defence's 'Initial Department Insights' briefing regarding OP BA noted that call out policies and procedures could have been 'more flexible to better support this type and scale of crisis'.⁵⁰ A more direct conclusion is that the urgency and priority of the OP BA mobilisation highlighted existing, but previously neglected, areas for remediation in the Total Workforce Model.

Not all reservists are available for call out. Exemptions had to categorise unavailable or unsuitable groups.⁵¹ Approximately 10 percent of reservists subject to call out applied for exemptions. Many of them were already involved in the emergency response as civilians.⁵² Others were unavailable for a range of personal and employment reasons. This valuable data will allow defence planners to better understand the readiness of the Army

Reserve brigades and what action can be undertaken to improve overall availability level.

The reduced tempo period over Christmas and New Year affected specific force preparation, albeit in different ways for different units and areas. Personnel on leave, those who had moved to new jobs and the associated gap until they were replaced created turbulence and continuity issues for units. This is a greater issue for full-time personnel, as they often have to move interstate and are compelled to take leave during the Christmas period. Given the higher probability of a natural disaster during the high-risk weather season from September to March, the lesson is to create more personnel availability and capacity during the reduced tempo period. One option may be to 'stagger' the reduced tempo period and posting cycle for Reserve units to minimise the impact of the annual Christmas and New Year posting cycle and leave period. This adjustment would potentially advantage Reserve units' access to training areas, equipment and facilities while regular ADF units are on leave. Another option is to augment full-time units and principal headquarters such as Joint Operations Command with properly prepared reservists to ensure continuity during this time of year.⁵³

There was little time to conduct mission-specific training or attain specialised skilling before deployment to bushfire-affected areas. This greatly increased the pressure on the JTF headquarters to deliver just-in-time mission-specific information during the reception, staging, onward movement and integration (RSOI) processes conducted as forces arrived at the area of operations. This difficulty could be reduced by the introduction of additional training and specific skills (such as chainsaw operations) in the baseline requirement for all Reserves. This would potentially allow faster transition to operations and a wider range of tasking. Another option is to develop regional mission-specific training package outlines for various types of disasters, which could be updated regularly and disseminated when needed before deployment.

Deployment

The deployment function describes the movement of force elements to areas of operation. With the bulk of the Australian Army's full-time units located in Brisbane, Townsville and Darwin, projecting force into the southern and western parts of Australia was challenging because of the distance involved and the transport resources, already limited due to the

time of year, required. During the bushfires some forces, mostly Reserve units, were already in or near fire-affected areas. However, the bulk of the forces had to deploy significant distances to bushfire areas after assembling at home base locations.⁵⁴ While the people and their personal equipment were quickly transportable by air, the heavy equipment and vehicles were slower to deploy. This contributed to the noticeable gap of about five days between the government's announcement of the Reserve mobilisation on 4 January and the arrival of significant numbers of troops in the affected areas beyond the regionally based contingent already there.⁵⁵ Regular units could not fill this time lag because of their own transit time from home bases in Brisbane, Townsville and Darwin. The opportunities to mitigate this risk include maintaining additional forces at higher readiness (i.e. shorter notice to move) for the season, by prepositioning equipment or by relocating full-time units. Another option to spread the risk is to increase the staff establishment and equipment scales of regional Reserve units.

Force Protection

For operations, this function is about actions to enhance the protection of the deployed force through intelligence, surveillance, contingency rehearsal and rapid response. The protection function for disaster relief is about safety and protection of life and property, both for deployed personnel and for the community. MAJGEN Ellwood urged commanders to prioritise force protection so that military forces did not 'become part of the problem'.⁵⁶ This function depends on timely intelligence and communications. Domestic disaster relief requires the integration and fusion of multiple, diverse data from sources such as emergency services, media and local government. In previous disasters, such as the Queensland floods in 2011, the military provided valued intelligence support during the response stages.⁵⁷ For OP BA, a limitation of the Reserve brigades was that they did not have organic intelligence staff. The need for regular Army intelligence staff to augment the three OP BA JTF headquarters hampered the early intelligence collation and analysis. Options to enhance this area include adding full-time intelligence staff to Reserve brigade headquarters, habitual integration of external full-time intelligence staff, and developing an intelligence skill set appropriate for disaster relief among organic Reserve brigade headquarters staff.

An important element of force protection is specialised equipment issue.

For OP BA this was generally limited to high-visibility vests. Also in demand were satellite telephones, which are useful in areas where mobile telephone networks are degraded through damage or capacity issues. This demand led to a reallocation of satellite phones from across the Army to elements deployed on OP BA. The detailed Defence evaluations of OP BA are likely to reveal other items of specialised equipment that, if procured and issued, will enhance future disaster relief efforts.

Tracking and accounting of military personnel in and around a disaster area is a critical task. The risk increases when dealing with a rapidly evolving threat such as a bushfire. Personnel tracking is especially difficult for domestic operations where there are large areas of operation, multiple entry points, ad hoc organisations, fragmented arrival of assigned forces, and personnel on different conditions of service. Having inexperienced JTF headquarters staff operating limited communications equipment, especially when local telecommunications networks were unavailable, contributed to increased risk of not knowing the whereabouts of personnel at all times. The lesson is to have JTF headquarters staff well rehearsed in the systems and processes of personnel tracking in a domestic disaster relief environment.

Employment

The daily OP BA ADF media update described many different tasks and activities undertaken or supported by ADF elements.⁵⁸ Many of these were similar to the military tasks required for warfighting and were therefore within the normal scope of training, albeit conducted in a domestic, interagency setting. These included airlift, civilian evacuation operations, ground transport, provision of accommodation services, tactical communication, military engineering, tree clearance, fence removal and repair, re-establishment of retrieved routes, fuel supply, environmental health services, water distribution, manned and unmanned aerial survey, primary medical care, pastoral support, sandbag filling and distribution, and civil-military cooperation (i.e. liaison).⁵⁹

Some employment was new and unfamiliar.⁶⁰ MAJGEN Ellwood encouraged local commanders to be innovative and proactive and to ensure maximum utilisation of ADF assets. Examples are veterinary support to pets, livestock and native animals; conducting population welfare checks; clearing debris; removing animal carcasses; supporting the distribution of donated

goods; supporting the conduct of fundraising events (such as BlazeAid); supporting evacuation/recovery centres; fodder drops; and containment line improvements.⁶¹

Traditionally Defence capability in disaster relief is applied in support roles, with civil agencies responsible for 'frontline' activities such as firefighting, managing evacuation centres and swift water rescue. A frequent point of discussion is the utility of using military forces in frontline disaster relief activities.⁶² There are certainly precedents in Australia and other countries for military forces with some training taking on these types of tasks.⁶³ This improvisation is not surprising given that military teams adapt to and operate in dangerous and chaotic environments with integral command, control and communications. Given the relatively brief training provided to many civilian volunteers, it is feasible to develop comparable just-in-time mission-specific training for disaster relief. However, there are strong arguments against using military forces in frontline disaster relief tasks.

There are compelling reasons why the military are best employed in a support rather than a frontline role. Their employment, as paid professionals, in the front line could demoralise civilian volunteers. There is the risk of state and local governments expecting Defence assistance well before their response agencies are 'overwhelmed'. Some might argue that any focus on disaster relief degrades warfighting competencies and reduces the forces available for military contingency obligations. For Australia, with a relatively small Army and even smaller Army Reserve, generating the required number for a credible frontline role seems impractical. For example, there are already about 195,000 volunteer firefighters nationally, more than four times the size of the Army.⁶⁴ These factors suggest that the military is most effectively used in a support role where it can best employ its robust and relevant capability and skills.

Army forces are made up of individuals, within a rank hierarchy, trained in military trades such as infantry, military engineering and aviation. These individuals are generally organised into specialist elements. Various specialist elements are grouped together to form units or formations suitable for the mission. The military trades are orientated to warfighting, and personnel have fungible skill sets that allow them to be quickly interchanged between force elements. Some military trades and units, while optimised for warfighting, have significant utility in the disaster relief context. For example, transport units, medical units, aviation units and military engineers were all

heavily committed to OP BA. However, the strength of this organisational method is also a weakness when it comes to applying the civilian (i.e. non-military trained) skills present in the military workforce, especially the Reserves.

Reserve forces typically have more specialised civilian skills to offer disaster relief than regular soldiers. These skills, irrelevant for much of a soldier's military career, can suddenly be valuable to a mission. Operations such as humanitarian assistance, disaster relief and stabilisation may require specific skills not normally nurtured in the force. For example, OP BA saw publicity given to a reservist who is a qualified arborist applying his civilian skills to tree management in the course of his operational duties.⁶⁵ Another example of a skill requirement that arose was for apiarists (beekeepers) who could move forward and assess the impact on beehives in bushfire-affected or threatened areas.⁶⁶ The reality is that the potential of civilian skills of reservists is largely underdeveloped, untapped or inaccessible. Military planners and commanders have only the most rudimentary knowledge of the civilian skills available.

This opportunity has been identified many times before, but efforts to create civilian skills databases in the past have proved largely ineffective.⁶⁷ Privacy concerns, legal liability issues, credential certification, currency of experience, and data management challenges all need to be overcome. There are also cultural barriers, such as defining roles by rank rather than skill and a generalist orientation, that hinder efforts. The ADF is not alone in this respect: the US Army's efforts to develop a comprehensive database have also stalled.⁶⁸ The insight provided by OP BA is that there is a valuable pool of skills potentially available within the Reserve community that could be applied to disaster relief. This potential might be enormously expanded by deliberately recruiting people with relevant skills into the Reserves.

Sustainment

The sustainment function is the capability to supply and administratively support a deployed force. The Reserve brigades each have some logistics capability provided by their combat services support battalions but rely substantially on static, garrison-based support services. However, these are designed only to support training and provide small elements for operations. They are not designed to support the full brigade deployed on operations.

The Reserve brigades were therefore logistic liabilities rather than logistic support providers before augmentation with additional forces. Further complicating sustainment was the force modernisation transition from the legacy vehicle fleet to the new LAND 121 fleet. The Reserve brigades relied heavily on the legacy fleets, but at the time of the unexpected mobilisation there were fewer than expected vehicles available from centralised loan pools, substantial vehicle maintenance backlogs, and urgent driver training requirements due to mixed fleets.

Rotation

The rotation function covers the relief and replacement of force elements throughout an operation. For the ADF's enduring operations, unit rotations occur after eight or 12 months. Disaster relief operations, on the other hand, tend to have much shorter timelines, though rotations can increase if operational tempo exhausts personnel earlier than planned. Military forces generally withdraw quickly as the immediate disaster effects subside and civilian capacity increases. The Reserve involvement in OP BA saw three broad rotations by employment category. The first tranche of volunteers were on Army Reserve training salary (ARTS—i.e. normal part-time pay and conditions) and mostly from the regions affected. A second tranche was of called out members on CFTS. Then a third tranche of volunteers was deployed on ARTS. This third tranche was largely drawn from formations in Queensland and Western Australia that had not been subject to the call out.

This use of volunteers on ARTS allows flexibility in the face of uncertain demands, without the legislative requirements of a call out or the administrative overhead required to move individuals to CFTS. On the other hand, the rate of volunteers will be lower than with call out (due to factors such as the lack of employment protection for volunteers), and the force elements assembled will be more ad hoc. By having an ADF disaster response force comprising full-time personnel as well as part-time personnel on ARTS and CFTS, commanders have the benefits of both certainty and flexibility, albeit with some additional administrative overhead required to manage a mixed workforce. OP BA should also provide insight as to options to phase deployment of personnel to better match the changing support requirements through the stages of response and recovery.

Redeployment

The redeployment function covers the return of deployed forces to home locations. During OP BA, the demobilisation of large numbers of reservists from full-time service highlighted some opportunities for enhancement. Traditionally treated as a ‘discharge’ from full-time service, it caused delays in processing that triggered several bureaucratic responses including cancellation of members’ Defence Travel Cards, revoked security clearances, and resetting SERCAT 5 repostings to a new full period of tenure.⁶⁹ Each of these problems created inconvenience and rework, highlighting that there are lessons to apply for the smooth transition between categories promised by the Total Workforce Model.

Reconstitution

The reconstitution function includes the actions required to redeploy forces back to or up to directed levels of readiness. OP BA has had a significant impact on the Army Reserve’s ability to return to levels of availability and to conduct individual and collective training in 2020. With significant numbers of reservists still deployed at the time of writing, there are some emerging challenges in the area of equipment maintenance and reduced availability for training later in 2020. Items of equipment such as vehicles and chainsaws have been in near-continuous use for a protracted period. Servicing and maintenance requirements will exceed the capacity of Reserve combat



services support battalions. This demand is likely to spill over to the regional joint logistics units and put ongoing pressure on loan pools and availability lead-times well into the year.⁷⁰ This is an example of why additional resources are required to reconstitute forces post deployment. Studies in the US have shown that reserve formations have additional factors that extend the resources and time required for reconstitution.⁷¹

Many Reserve personnel returning from deployment will have spent extended time away from civilian employment. This absence will reduce their availability for continuous training, career courses and training support requirements later in 2020. The consumption of personal time away from civilian work and family will affect the capacity for individual and collective training, especially within the 2nd Division, for some time to come. Another factor affecting training will be the expenditure of unit travel and operating expense budgets at a greater rate than forecast and for different purposes than originally planned.

General Implications of the Call Out

The ADF's response to the 2019–2020 bushfires showed the scale of effort required to meet political demand to assist the population in the event of a widespread disaster when the civil and emergency services have been overwhelmed. The community now expects leadership from the top and for the federal government to proactively release resources to the states and territories to protect life and property.⁷² With the government acknowledging the likelihood of an increasing rate and severity of natural disasters in the region, the ADF represents a key capability to meet political demand to respond quickly and effectively.⁷³ Yet using the ADF more in disaster relief comes with risk. OP BA shows that employing military forces optimised for warfighting for disaster relief comes at a high cost. Given that the ADF is both small in absolute international terms and very small indeed relative to our landmass, the concurrency risk is significant. This risk refers to the problems of using limited military forces to also meet existing security (currently some 13 operations globally) and contingency obligations.⁷⁴ John Blaxland of the Australian National University, who argues for systems of national and community service, has highlighted this issue, noting Australia's 'limited sovereign capacity' and arguing that the relatively small size of the ADF provides good reasons to look beyond the current ADF structure for additional disaster relief capacity.⁷⁵

The use of the ADF Reserves for domestic disaster relief is entrenched in policy and practice. Yet since the end of the Reserve Response Force in 2012 this mission has remained on the margins. There is a longstanding assumption that a force prepared for more complex warfighting operations can readily step back to other activities perceived as less demanding, such as disaster relief. This is certainly true where governments are prepared to accept the associated risk. However, disaster relief is complicated and politically sensitive, which may explain why, until now, the government has been reluctant to use the Reserve call out arrangements that have been in place since 2001. This reticence has made it difficult for Defence planners to include Reserve formations in contingency plans and limited the response of Reserve forces to contributing largely ad hoc groupings of volunteers with improvised command and control, sustainment and rotation arrangements.

The success of the Reserve call out for OP BA builds a strong and timely argument for enhancements in the functions of force projection for disaster relief. Political and community acceptance of the use of the Reserves for this mission appears strong (although the appetite for more frequent call out of Reserves is yet to be tested). The Prime Minister has promised a new focus for the ADF:

*An enhanced and more proactive role for our defence force in response to domestic natural disasters will have implications for our force structure, for its capability development, its command, its deployment and the training of our defence forces.*⁷⁶

There will be many opportunities to include greater considerations for disaster relief and the lessons from OP BA in the next round of organisational and force structure reviews. Fortunately, any enhancement of disaster relief capability is not only valuable domestically but also applicable to international disaster relief and stabilisation operations. Improvements will also enhance the resilience of communities where reservists live and work.

Options for enhancing Reserve capability within the existing organisation include:

- inclusion of specific disaster response proficiencies in baseline individual training for Reserves (similar to the RRF course)
- wider Reserve participation in domestic response focused collective training up to formation level

- a larger role for Reserves in pre-disaster liaison and coordination with local disaster management authorities
- review of the structure and equipment of extant Reserve units to improve disaster response capabilities—this could include larger numbers of relevant military trades (such as engineers), command and control enablers such as intelligence staff, and deployable communications equipment for brigade headquarters
- exploring options to increase the readiness and employment of Reserve elements during the high-risk weather season, such as offsetting Reserve posting cycles and augmenting the staff of major headquarters
- considering the location and facilities of Reserve regional depots, long under consolidation pressure, in the context of national disaster response and community resilience requirements.

Three more radical options for enhancing Reserve capability that fall outside current paradigms are developing the means to track and employ civilian skills on operations, a new service category to better deploy specialists, and forming units designed for disaster relief type operations. These initiatives could unlock latent potential already in the organisation and also allow the ADF to reach more deeply into the national human capital base in support of its missions.

A persistent organisational human capital blind spot ripe for tackling is that of latent civilian skills present in the part-time workforce. The idea of systemically drawing on these civilian skills, whether conventional or non-traditional, is not new. However, it is one that has not been successfully implemented within Army, although police forces have been successful in creating something similar enabling them to draw on the community in emergencies. The capability to better record and track relevant civilian skills is promised by big data analysis techniques and improved human resource information systems, but employing them operationally will require powerful direction from organisational leaders, particularly to overcome organisational paradigms in military trades, rank hierarchy and organisational structure. However, trends in the contemporary labour market show a way forward. The technology-enabled ‘gig economy’, exemplified by platforms such as Airtasker and Freelancer, is unlocking latent labour capacity through dynamic matching of skill to task, outside traditional work organisation structures.

The traditional work organisation structure of the Army Reserve has been successful, but opportunity remains to engage a wider portion of the national talent pool in Defence. A service model that features targeted recruitment, specialist orientation, minimal training times and flexible service obligations could revitalise the management of specialists, increase recruitment, provide access to valuable skills and improve engagement with underutilised portions of the Australian population base. The Singapore Armed Forces Volunteer Corps is an example of such a model but, significantly, many of the elements are already present but underutilised in the Australian Army in areas such as the Regional Force Surveillance Units.⁷⁷ Such a service model could allow the rapid acquisition and retention of relevant civilian skills from within the military. For example, an infantry private who is a civilian trauma counsellor could temporarily transfer to the new service model to lead a team deploying to a disaster relief operation. This service model could also support the rapid recruiting of civilian skills needed for operational purposes or to support emerging capabilities.

Another, related, option is the creation of standing units or force elements that specialise in aspects of disaster relief like operations. This has precedents in other armies. The UK's stabilisation unit and now disbanded reserve pioneer units are examples. This approach supports the concentration of relevant skills (including civilian skills), supported by a focused headquarters that can influence doctrine and create processes optimised for the disaster relief environment. Such units, while not optimised for warfighting, would have utility in other types of operations that military forces are regularly engaged in, such as capacity building, stabilisation and humanitarian assistance. These three initiatives, enabled by the Total Workforce Model, could potentially provide much more operational flexibility in domestic disaster relief and use previously unrealised capacity.

Conclusion

The ADF played an important role in the interagency response during the bushfire crisis. The associated call out of reservists reflects both a traditional domestic role for part-time forces and a newly proven mobilisation capability for the Army in Motion. As the lessons of OP BA are absorbed by the ADF there will be an opportunity to recast the value proposition of the Reserves as part of the Total Force. As government seeks to build the national resilience to natural disasters, the ADF Reserves are an accessible, persistent and cost-effective means to apply available human capital in regions and communities. After all, in an uncertain strategic environment and given emerging non-traditional security threats, 'every possible capability' may be required again soon.

The OP BA mobilisation has stress-tested critical aspects of the Total Workforce Model and highlighted areas for process improvement. Defence planners can proceed with more confidence in the ability of the ADF to mobilise large numbers of Reservists quickly. Process enhancement to smooth the transition between service categories and service options will support better utilisation of the ADF's Total Workforce.

More particularly, auditing OP BA using the 10 functions of force projection reveals several important insights for enhancing Australia's resilience and timely responses to natural disasters. The major lessons are for generic force preparation. Reserves have the advantage over regular units in that they are already present in communities vulnerable to natural bushfire and flooding events. Army Reserve formations and units can take more responsibility in conjunction with joint operations support staff to develop lasting and habitual relationships with local disaster management authorities through cross-training, joint planning and exercises. Preparedness can be enhanced

through developing and refining training regimes to include baseline qualifications in disaster response, and development of mission-specific training packages for likely scenarios. This training could be extended across a far greater portion of the Army Reserve than previously. The defunct Reserve Response Force training regime is a good point of reference.

In the command function, adapting the structure, staffing and training of Reserve brigade headquarters to better enable the command of disaster relief operations is a necessary enabler. This should include the enhancement of suitable organic intelligence and personnel-tracking capabilities. Specific preparation can be improved through streamlined processes to transfer large numbers from SERCAT 5 to SERVOP C. There is also an opportunity to review the risks associated with the traditional reduced tempo period at the end of the calendar year. Reserves could help mitigate risk through augmentation of major headquarters and through an offset posting cycle.

More radically, Army can make far better use of the civilian skills already present in its Reserve workforce. It could develop a new part-time service option designed to link skill to task, to support recruiting from a wider portion of the population and to facilitate the operational deployment of specialists with needed skills. Finally, Reserve units specialising in the tasks needed for disaster relief could be formed to enhance the ADF's preparation for and response to natural disasters.

Many of these opportunities not only apply to domestic disaster relief but also are relevant to the capability required for offshore disaster relief, capacity building in regional nations, and stabilisation operations. These opportunities need to be balanced against the preservation of warfighting capability and the opportunity costs of a greater focus on domestic disaster relief. Reserve forces have limited time for training and come at a higher marginal cost for operational employment. The tolerance of employers and families for more frequent operational service by reservists, primarily via compulsory call out, is not well understood in Australia yet. More broadly, the more significant role of the ADF in disaster relief may have negative implications for the unpaid volunteer-based emergency service organisations. There is also a risk for Defence of creating escalating dependencies and expectations in the community and government. However, indications are that Defence needs to be 'ready now' for domestic disaster relief operations while taking demonstrable action to be 'future ready'. The Army Reserve can play a key role in both.

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Charter

The AARC is dedicated to improving the Army's understanding of the profession of arms. Its purpose is to promote the contribution of the land force to joint operations in peace and war. The AARC conducts applied research on the employment and modernisation of Army with particular reference to Australia's circumstances and interests. It raises the level of professional debate on war and its challenges within the Army, the nation and international audiences. The AARC enhances the professionalism, leadership and ethical awareness of Australian soldiers and officers.

To disseminate ideas and to promote debate, the AARC maintains a vibrant publication and seminar program. The AARC's flagship publication is the Australian Army Journal, now in its fourteenth year. The AARC also publishes Occasional Papers and shorter works on its blog, the Land Power Forum. Fortnightly the AARC hosts a seminar series in the Ngunnawal Theatre in Russell. The AARC also hosts academic level conferences such as 'Ethics under Fire' and 'On Ops'.

The AARC contributes to Army's understanding of the future character of war and the advancement of land power through a number of initiatives.

These include:

- organising and conducting the Chief of Army's Land Forces Seminar as a part of the Land Forces;
- contributing to the development of strategic concepts, strategies, and force structure options;
- assisting in the development of Army doctrine and facilitating its incorporation into future Australian Defence Force joint doctrine;
- managing the Keogh Chair and the Staff Ride Programs;
- managing the Army Research Scheme; and
- mentoring the work of the CA Scholars and CA Honours Students.

